



Installation Instructions

Date: March 2004
Order No.: P-I-82.60/299
Supersedes:
Group: 82

**SUBJECT: MODEL 220.170/174/175/176/183/184
MODEL YEAR 2004
SATELLITE RADIO INSTALLATION**

We are interested in your comments and/or suggestions regarding these installation instructions—please e-mail them to technicalinformation@mbusa.com

 **WARNING**

Do not disconnect the negative battery cable. Extensive reprogramming requirements will otherwise be necessary. **WIRING HARNESES WILL BE ELECTRICALLY ACTIVE. IT IS THEREFORE NECESSARY TO EXERCISE EXTREME CAUTION WHILE EXECUTING THESE INSTALLATION INSTRUCTIONS. FAILURE TO DO SO COULD RESULT IN SEVERE VEHICLE DAMAGE, PERSONAL INJURY, OR DEATH FROM ELECTRICAL SHOCK.** Keep the ignition and radio powered OFF through the final test.

MOST notes:

- Fibers easily damage—handle fibers with care to prevent cuts, nicks, abrasions, kinks, and crushing.
- Minimum bend radius for fibers is 25 mm.
- Fiber optics “ring configurations” must form a closed loop to function (i.e. couple the input of a component with the output of the preceding component).

This bulletin has been created and maintained in accordance with MBUSA-SLP 5.1, Document and Data Control, and MBUSA-SLP 16.1, Control of Quality Records.

A. Installation preparation

1. Read these installation instructions in their entirety before proceeding.
2. Unpack and compare the installation kit contents against the Parts Information list—Section G.
3. Open the trunk and remove the trim panel on trunk lid underside.
4. Remove the floor covering in the trunk.
5. Remove the left liner panel in the trunk.
 - See *WIS* document AR68.30-P-4600M, “Remove/install paneling in trunk”
6. Cover the trunk floor to catch metal chips from drilling.
7. Remove the center high-mounted stop lamp.
 - See *WIS* document AR82.10-P-5375M, “Remove/install center high-mounted stop lamp”

Note: On vehicles with interior fittings of a different color, retrofit the diode set for the center high-mounted stop lamp—Proceed to Step 8. Otherwise, skip to Section B.

8. Unclip the diode set from the housing of the center high-mounted stop lamp (Figure 1).

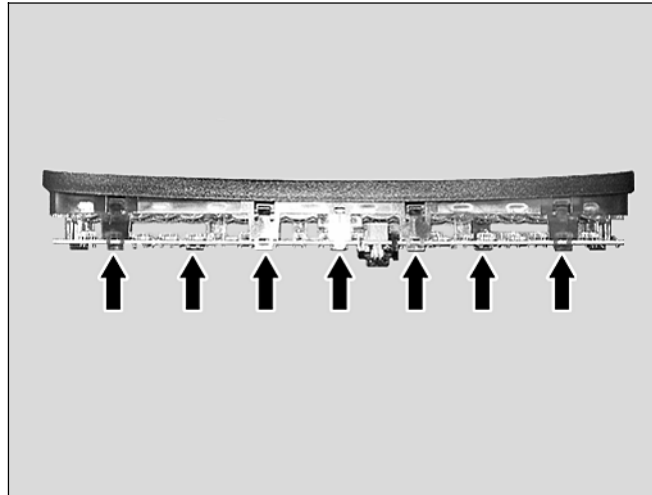


Figure 1

P82.60-4560-01

9. Clip the new diode set into the old housing (A, Figure 2) using the punch-out corner (Arrow, Figure 2).
10. Reinstall the center high-mounted stop lamp.
 - See *WIS* document AR82.10-P-5375M, “Remove/install center high-mounted stop lamp”

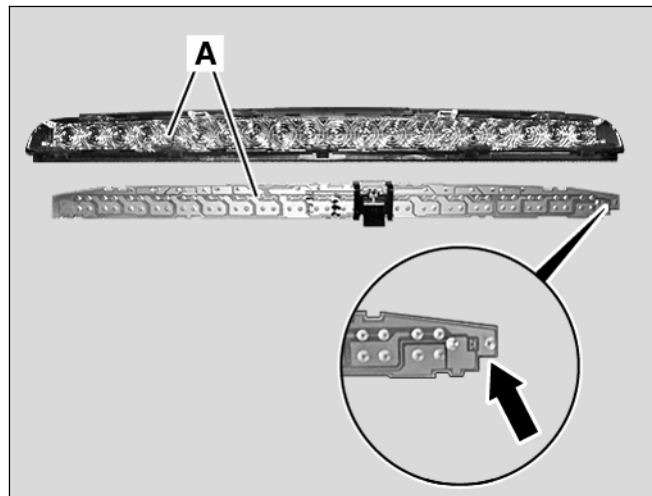


Figure 2

P82.60-4561-01

B. Installing the SDAR antenna

1. Find, hidden between the reinforcement panel and trunk lid underside (A & B, Figure 3), the preinstalled, foam-covered antenna leads and expose them.
2. Measure and mark the trunk lid underside at the center of the recessed hole in the reinforcement panel (Arrow, Figure 3)
3. Apply masking tape covering an 8-in. x 8-in. area on the trunk lid exterior where the drilled hole will be.
4. From the trunk lid underside, drill a 3-mm diameter pilot hole at the measured mark in the recessed hole in the reinforcement panel.

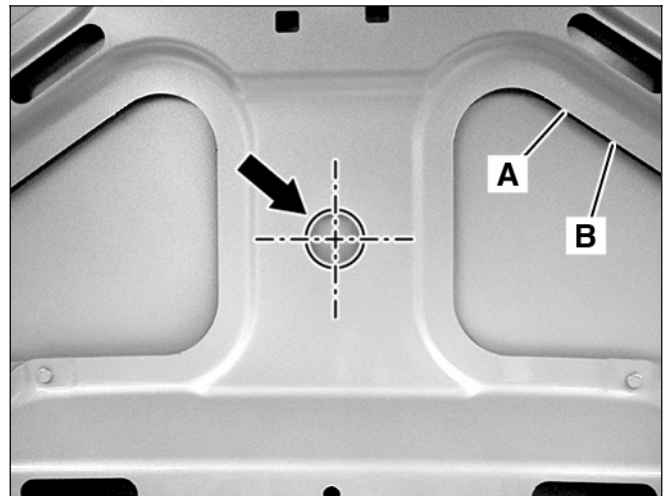


Figure 3

P82.60-4173-01



CAUTION

Risk of bodily injury is involved. Use protective eyewear.



NOTICE

Be careful not to damage the trunk lid while drilling.

5. Drill the 3-mm pilot hole to an enlarged 6-mm diameter pilot hole.
6. Drill the 6-mm diameter pilot hole to a 20-mm diameter hole using a UniBit®.



NOTICE

DO NOT use a hole saw. Damage to the trunk lid will result from using a hole saw.

7. Remove the burrs around the hole edge and carefully clean away the metal chips from the trunk lid.
8. Remove the tape on the trunk lid and remove the cover with metal chips on the trunk floor.
9. Thoroughly coat the 20-mm diameter hole edge with primer (Part Number A 000 986 06 50) and allow it to dry.
10. Remove the wax paper backing from the self-adhesive side of the “thicker” plastic washer (A, Figure 4).
11. From the trunk lid underside, affix the adhesive side of the washer around the 20-mm hole (A, Figure 4).

Note: Make sure the washer seats properly and the top of the inside lip is flush or protruding—never recessed—from the top of the trunk lid.

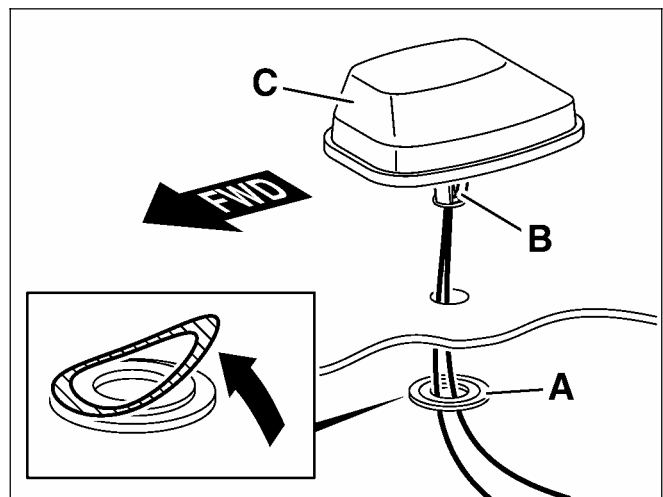


Figure 4

P82.60-4510-01

12. Loosen the T25 Torx screw in the SDAR antenna sleeve (Figure 5).
13. Feed the SDAR antenna leads, from the topside of the trunk lid, through the affixed washer (A, Figure 4).
14. Carefully insert the SDAR antenna sleeve (B, Figure 4) into the washer (A, Figure 4) until it snaps into place.

Note: Hold the washer from beneath while inserting the SDAR antenna sleeve to prevent it from pushing out of the trunk lid.



NOTICE

Be careful not to damage the trunk lid by applying excessive force.

15. Orient the SDAR antenna straight with the vertical end (C, Figure 4) facing the vehicle front and the beveled end the vehicle rear.
16. Apply light downward pressure to the SDAR antenna so the gasket fully seats flush against the trunk lid.



NOTICE

Be careful not to damage the trunk lid by applying excessive force.

17. Tighten, but do not over tighten, the T25 Torx screw in the SDAR antenna sleeve (Arrow, Figure 5) while holding the antenna from above to keep it from turning.
18. Fold back the foam sleeve to expose the connectors (A, Figure 6) of the preinstalled antenna leads on the trunk lid underside.
19. Install a plastic connector lock-clip on the antenna lead male connector (A, Figure 6).
20. Connect the preinstalled antenna leads to the SDAR antenna leads and fold down the foam sleeve over the coupled connectors (A, Figure 6).

Note: Make sure the connectors lock into the plastic connector lock-clips.

21. Secure the antenna leads to the trunk lid underside with adhesive felt tape (B, Figure 6).



Figure 5

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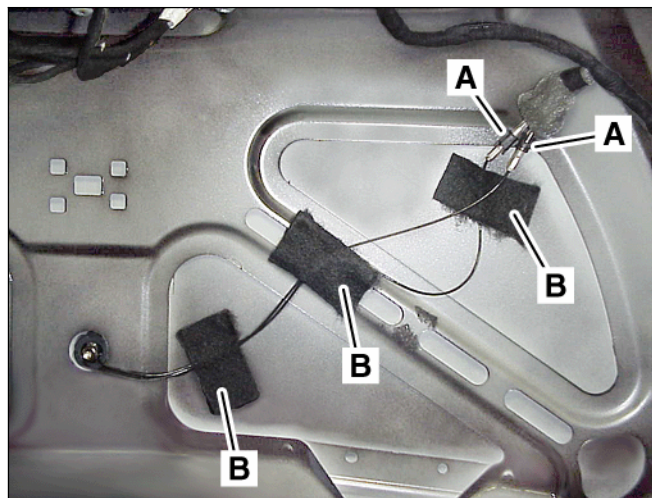


Figure 6

P82.60-4562-71

C. Installing the SDAR control module

1. Find the MOST adapter harness in the installation kit (Figure 7).



NOTICE

Do not kink optical fibers, route them over sharp edges, or bend them in radii smaller than 25 mm.

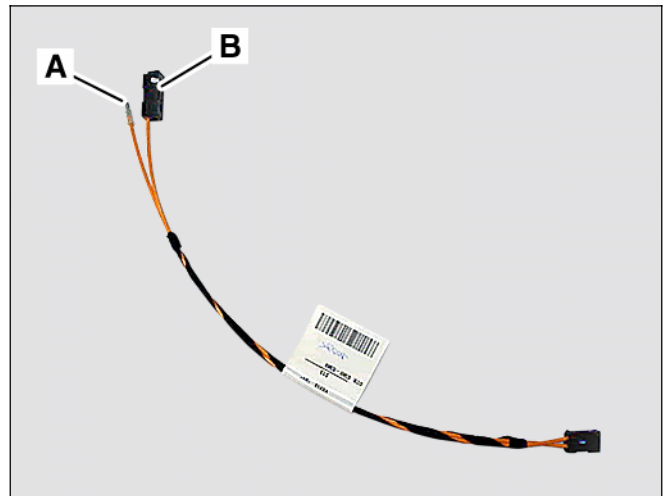


Figure 7

P82.60-4563-71

2. Find the MOST fiber optic coupler behind the Car Navigation/CD Changer bracket assembly (Figure 8).

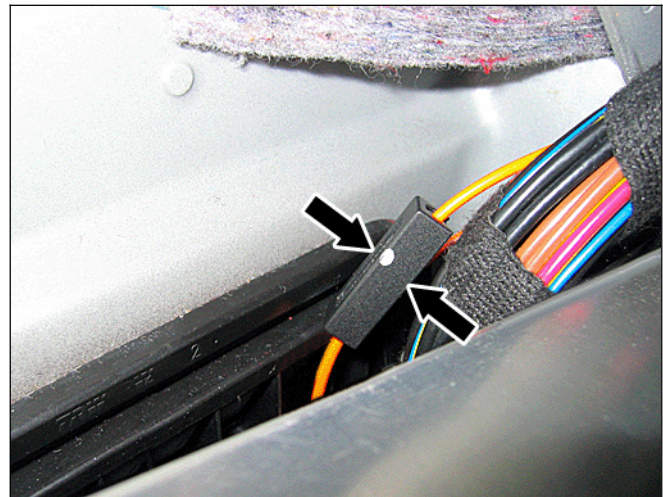


Figure 8

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3. Carefully remove the clear fiber end (A, Figure 9) going into the top of the coupler (B, Figure 9).
4. Insert the exposed clear fiber end (A, Figure 7) of the adapter harness into the vacant chamber (B, Figure 9) of the coupler behind the Car Navigation/CD Changer bracket assembly.
5. Insert the exposed clear fiber end (A, Figure 9) removed from the MOST fiber optic coupling behind the Car Navigation/CD Changer bracket assembly into the coupler (B, Figure 7) of the adapter harness.

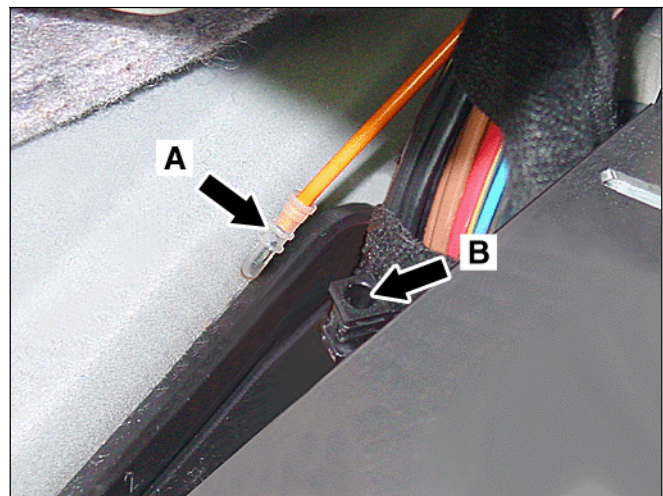


Figure 9

P82.60-4580-71

6. Behind the Car Navigation/CD Changer bracket assembly, locate and expose the:
 - SDAR power supply cable (A, Figure 10)
 - SDAR antenna leads (B, Figure 10)
7. Remove the foam sleeve from the power supply connector (A, Figure 10).
8. Fold back the foam sleeves to expose the antenna lead connectors (B, Figure 10).

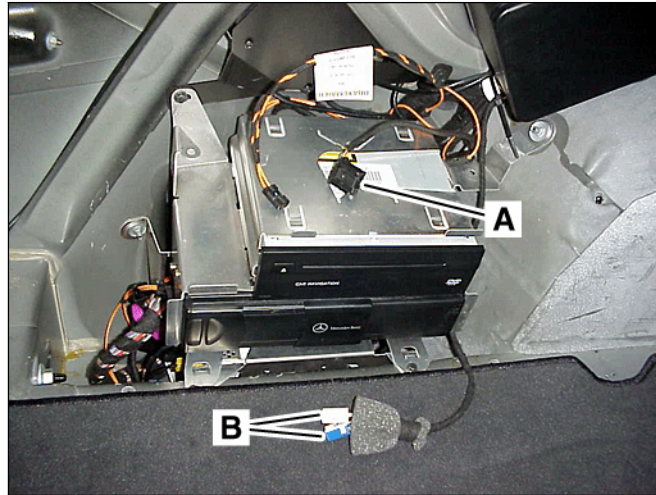


Figure 10

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9. Insert the connector (A, Figure 11) of the MOST adapter harness into the back of the SDAR power supply connector (B, Figure 11).

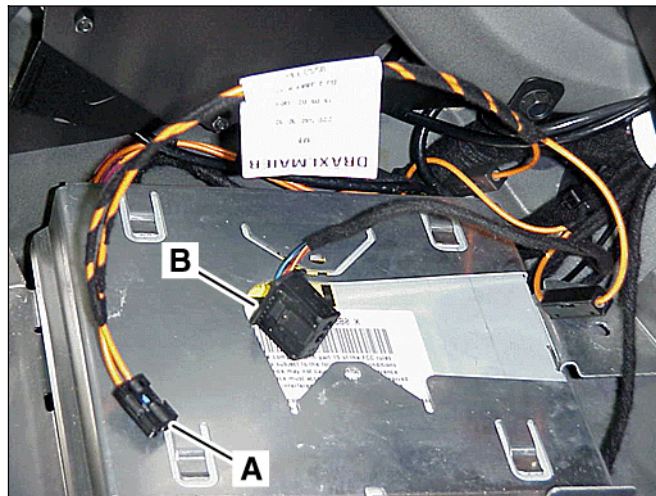


Figure 11

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10. Mount the SDAR control module to the bracket with three kit-included M5 hex nuts (Figure 12).

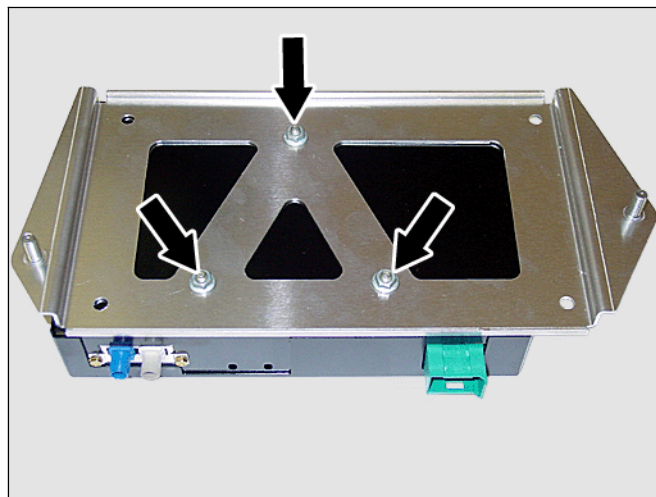


Figure 12

P82.60-4568-71

11. Find the antenna leads adapter harness in the kit.
12. Place the SDAR control module/bracket assembly, with the connector receptacles facing upward, near the point of installation (Figure 13).
13. Connect the straight blue and white connectors of the antenna leads adapter harness to the preinstalled antenna leads of like color (A, Figure 13) and fold down the foam sleeve over the coupled connectors.
14. Connect the 90° angled blue and white connectors of the antenna leads adapter harness to the like color connector receptacles of the SDAR control module (B, Figure 13).
15. Connect the power supply/MOST connector to the SDAR control module (C, Figure 13).
16. Mount the SDAR control module/bracket assembly by inserting the threaded studs into the holes in the upper arms of the Car Navigation module/CD changer bracket and securing it with two 10-mm hex nuts (Figure 14).



NOTICE

Do not catch the optical fibers and power supply cable between the brackets during installation. Carefully secure the optical fibers and power supply cable behind the bracket assembly.

Note: If the vehicle has driver-dynamic seat (DDS), go to Section D. Otherwise proceed to Section E.

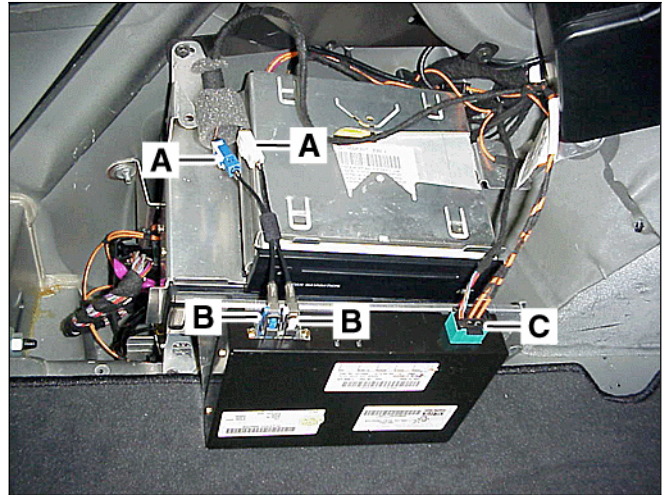


Figure 13

P82.60-4583-71



Figure 14

P82.60-4584-01

D. Mounting the SDAR control module/bracket assembly on vehicles with drive-dynamic seat (DDS)

1. Carefully cut the wire tie anchoring the DDS harness to the Car Navigation/CD Changer bracket (Figure 15).
2. Remove the wire-tie anchor from the Car Navigation/CD Changer bracket (Figure 15).

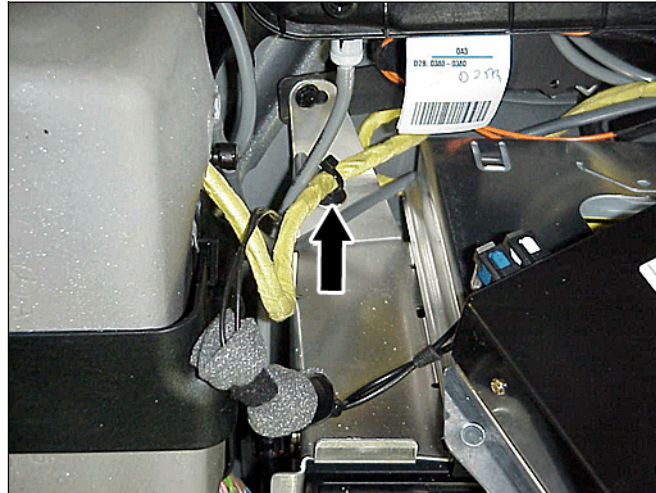


Figure 15

P82.60-4571-71

3. Reroute the DDS harness (Arrows, Figure 16) to allow the threaded stud from the SDAR control module bracket (A, Figure 16) to mount in the hole where the wire tie was anchored (Arrow, Figure 15).

Note: Be careful not to stress the DDS harness or allow it to rub against the bracket edges.

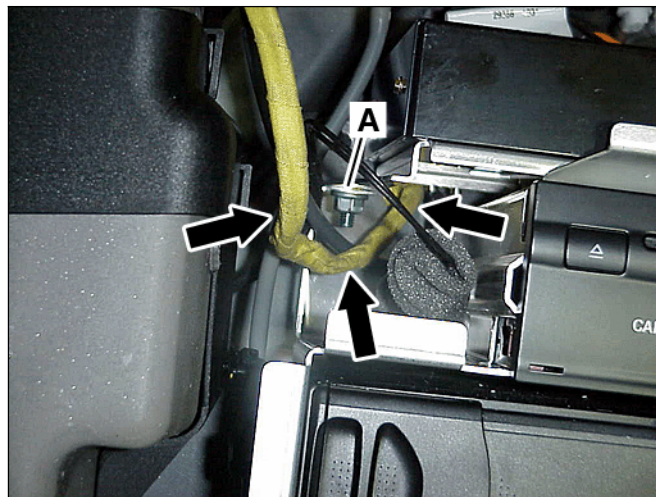


Figure 16

P82.60-4572-71

E. Version coding

1. Connect the Star Diagnosis System (SDS) to the vehicle and perform the version coding outlined below.
2. Set the MOST ring configuration to match that of Figure 17 by using the path:

Control units > Information and communication > Audio, video, navigation, and telematics > AGW > Retrofitting of MOST components > Select "F2" to restart ring > Select "F2" to view actual configuration of ring > Select "F2" to proceed > Select "YES" to write the configuration > Select "F2" to erase fault memory

Note: The MOST ring configuration in Figure 17 is an example of a configuration including every component. Some installations will not include all the components shown in the example. If a component is not present, connect the preceding component to the component following the one not present.



NOTICE

DO NOT alter the configuration in Figure 17 to match the vehicle configuration. Failure to have the configuration set as indicated in Figure 17 will result in erroneous system operation and/or intermittent malfunctioning of some or all components.

3. Check the DTC memory of all installed components and the head unit. Investigate and identify any present DTC(s). Once identified, correct the source of the DTC(s) and clear the DTC memory.

Note: Powering up the newly installed system prior to version coding will set errors in the MOST ring configuration. Ignore these errors during the initial DTC check. If, after clearing the DTC(s), they return in the next step, a configuration error is present. Locate and correct the error.

4. Confirm no new DTC(s) are present in the MOST system group.

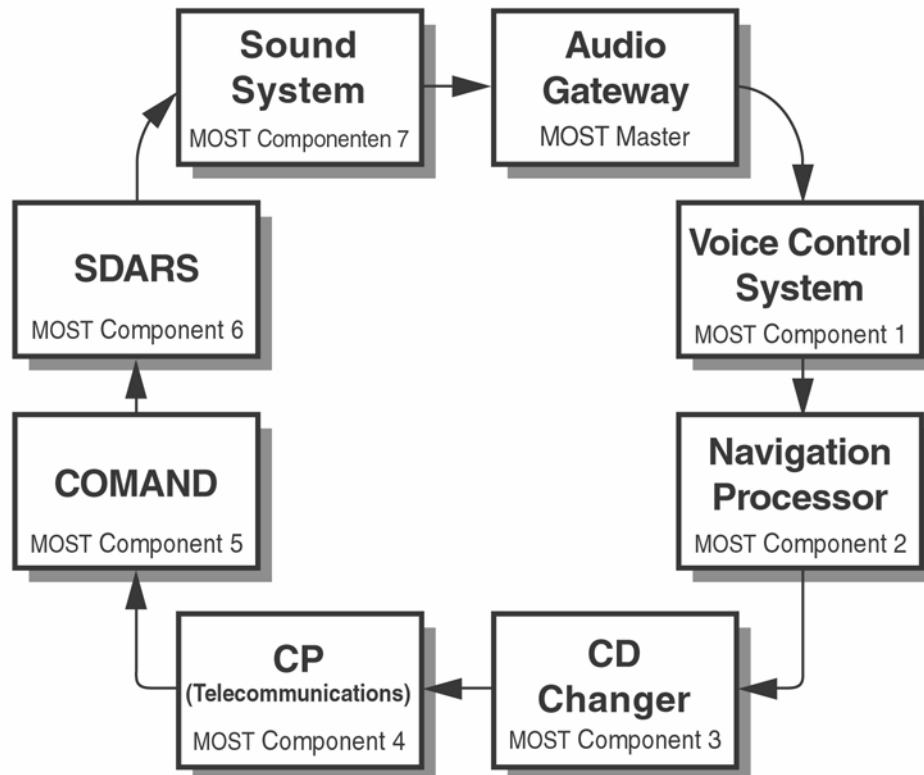


Figure 17

P82.60-4573-11

F. Final assembly and function testing

1. Verify proper Satellite Radio operation per the following checklist.
 - Audio is functional (radio and CD changer)
 - Satellite radio display is present on the head unit
 - Sirius preview message is heard when Satellite Function is selected on the head unit¹
¹The vehicle must be in a geographic area that allows reception.
2. Reinstall the trim panel on trunk lid underside.
3. Reinstall the left liner panel in the trunk.
 - See *WIS* document AR68.30-P-4600M, "Remove/install paneling in trunk"
4. Reinstall the floor covering in the trunk.

G. Parts information

Qty.	Part Name	Part Number/Exchange
	S-Class satellite radio kit	B6 783 0001
1	Control module (MOST)	B6 783 0012
1	Antenna	B6 783 0014
1	Bracket	B6 783 0016
1	Adapter cable	B6 783 0029
1	Adapter, antenna connector	B6 783 0042
1	Brake light (charcoal)	B6 783 0041
1	Lock clip, antenna lead connector	B6 783 0048
1	Felt, 70 mm x 100 mm	A 000 983 89 10
1	Primer	A 000 986 06 50
2	Nut, M6	N 913023 006001
3	Nut, M5 x 0.8	N 913023 005002

Note: This installation cannot be claimed under warranty.